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Industry Mourns the Passing of Roland Haitz, age 80, Pioneer of the Solid-State Lighting Revolution

Dr. Roland Haitz, a pioneer of the solid-state lighting revolution and an engine of innovation throughout his career, has passed away at the age of 80 at his home in Portola Valley, California. He is survived by his wife of 49 years, Bente Haitz, his two children and three grandchildren.



Dr. Haitz's career in science, opto-electronics and solid-state lighting spanned more than 50 years, most of it while associated with Hewlett-Packard and its offspring companies, Agilent, Avago, and Lumileds. He personally led the development of many families of light-emitting technologies that have become ubiquitous items today, from the displays of hand-held calculators to the LED tail lights of automobiles.

He pursued technical innovation even in the last years of his life, joining a startup after 'retirement' to continue his research and product development. Over his decades of work, Dr. Haitz submitted fifty patent applications, the last of which was filed just months before his passing. His last paper – an invited commentary on this year's Nobel Prize in Physics for the invention of the bright blue LED, itself the key to realizing his dreams of a world newly lit – was published in the prestigious European journal, *Annalen der Physik*, just days before his passing.

Dr. Haitz is best known for Haitz's Law, the LED industry's equivalent to Moore's Law for transistors. Like Moore's Law, his predictions for LEDs

were so accurate that they guided the investment and R&D strategies of the solid-state industry, initiating and sustaining an on-going transformation in lighting that has progressed from his personal vision to global revolution, all in just the last 15 years. The opportunity to purchase increasingly affordable light-bulbs that will stay lit for the lifetime of the lamp and at a much lower cost of electricity? This is due to Dr. Haitz and Haitz's Law.

Growing up on a farm in Germany during World War II that depended on horses to till the fields, Roland Haitz knew all about conserving resources. His two principal mentors, the creators of the modern fluorescent tube and the transistor, inspired him to spend his professional life uniting these worlds of optics and electronics. At age 65, when he was 'supposed' to retire, he brought it all together and spent the next fifteen years catalyzing, proselytizing, and becoming 'godfather' to the ongoing global transformation to solid-state lighting.

Then, at age 76, he joined the startup QuarkStar to implement the next stages of his vision for light and lighting. "Roland's view was unique. His initial motivation for solid-state lighting was based on economics and energy savings, but he never stopped questioning, exploring, innovating," said Dr. Louis Lerman, founder of QuarkStar. "As both visionary and technologist, he was always focused on the next frontier – and always with the goal of bettering the world. He saw the potential in LEDs to bring about the personalization of light akin to the way modern electronics has personalized the delivery of information. He left us with both the vision and the technological foundations to begin the realization of this dream."

Dr. Haitz's last remarks on solid-state lighting underscore the progress to come: "Solid-state lighting is where the internet was in the 1980s. Just as we could not then have predicted what the internet is now, 30 years later, we cannot foresee all that light and lighting will become in the next decades. We know simply that it will be wondrous and beautiful."

A complete biography of Dr. Roland Haitz and more [information about Haitz's Law](#) can be downloaded.